

# REMARKS

Claims 28-46 are pending in this application. Claims 1-27 have been cancelled and claims 28-46 are added. Examples of support in the specification for the new claims can be found in the following table. No new matter is added.

Claim	Recitation	Support
28	A method of identifying a compound capable of binding to a Mowgli GPCR polypeptide, the method comprising contacting a Mowgli GPCR polypeptide with a candidate compound and determining whether the candidate compound binds to the Mowgli GPCR polypeptide	Page 6, lines 13-16
	wherein the compound is suitable for treating pain or decreasing sensitivity to pain	Page 74, lines 5, 9 Page 112, line 18
	wherein the pain is associated with activity of Mowgli GPCR polypeptide	Page 8, lines 10, 13
29	wherein the compound is a agonist of Mowgli GPCR polypeptide	Page 47, line 23
	wherein the compound is a antagonist of Mowgli GPCR polypeptide	Page 47, line 24
30, 44	wherein the Mowgli GPCR polypeptide comprises an amino acid sequence shown in SEQ ID NO: 3, SEQ ID NO: 5, SEQ ID NO: 6, or SEQ ID NO: 8	Page 4, lines 18-19
	or a sequence having at least 90% sequence identity thereto	Page 18, line 20
31	wherein a cell expressing a Mowgli GPCR polypeptide is contacted with the candidate compound	Page 6, lines 5-6, 10
32	wherein a decrease in intracellular cAMP levels is detected, thereby identifying an antagonist of Mowgli GPCR polypeptide	Page 6, lines 4-7 Page 50, lines 13-21
33	wherein an increase in intracellular cAMP levels is detected, thereby identifying an agonist of Mowgli GPCR polypeptide	Page 50, lines 13-21
34	wherein the compound capable of binding to a Mowgli GPCR polypeptide is an antibody	Page 54, line 24
35	wherein the pain is neuropathic pain or inflammatory pain	Page 112, lines 19-20
36, 45	administering the compound capable of binding to Mowgli GPCR polypeptide to an animal that does not express functional Mowgli GPCR polypeptide	Page 55, lines 12-13 Page 56, lines 2-3
	determining whether the compound produces a physiological response in the animal	Page 56, line 1
37, 46	the physiological response is selected from the group consisting of . . .	Page 56, lines 5-9
38	A method of identifying a compound for treating pain or decreasing sensitivity to pain	Page 74, lines 5, 9 Page 112, line 18
	identifying a compound capable of binding to a Mowgli GPCR polypeptide by contacting a Mowgli GPCR polypeptide with a candidate compound and determining whether the candidate compound binds to the Mowgli GPCR polypeptide	Page 6, lines 13-16

38	administering the compound capable of binding to a Mowgli GPCR polypeptide to an animal	Page 57, line 6
	determining whether the animal exhibits a decrease in sensitivity to pain, thereby identifying a compound for alleviating pain or decreasing sensitivity to pain	Page 57, lines 5-8
39	wherein the animal expresses functional Mowgli GPCR polypeptide	Page 57, line 6
40	wherein the animal is a wild type animal	Page 57, line 6
41	wherein the animal is a rodent	Page 55, line 19
42	wherein the animal is a mouse	Page 55, line 19
43	wherein the decrease in sensitivity to pain is determined using a Paw Pressure Test, a Tail-Flick Test, or a Formalin Test	Examples 6-8

The Office Action required further restriction under 35 U.S.C. § 121 as follows:

I. Claims 13-18, 26, and 27, drawn to a method of identifying a molecule suitable for the treatment or alleviation of pain, comprising contacting a candidate molecule with a Mowgli GPCR polypeptide and determining if the candidate molecule is an agonist or antagonist, classified in class 435, subclass 4.

II. Claims 19-23, drawn to a method of identifying an agonist or antagonist of a Mowgli GPCR polypeptide, comprising administering a candidate molecule to an animal and determining whether the animal exhibits an increase in sensitivity to pain, classified in class 514, subclass 1.

III. Claim 24 (in part), drawn to a method for providing an indication useful in the diagnosis of or determination of susceptibility to pain in an individual, comprising detecting a change in the expression pattern of a Mowgli polypeptide, classified in class 435, subclass 7.1.

IV. Claim 24 (in part), drawn to a method for providing an indication useful in the diagnosis of or determination of susceptibility to pain in an individual, comprising detecting a change in the level of a Mowgli polypeptide, classified in class 436, subclass 501.

V. Claim 25, drawn to a method of providing an indication useful in the diagnosis of or determination of susceptibility to pain in an individual, comprising detecting a polymorphism in a Mowgli polynucleotide, classified in class 435, subclass 6.

Applicants elect Group I, now claims 28-35, drawn to a method of identifying a compound capable of binding to a Mowgli GPCR polypeptide, with traverse. New claims 36-46 are drawn to a method of identifying a compound capable of binding to a Mowgli GPCR

polypeptide comprising, *inter alia*, administering a candidate compound to an animal, and are classified in Group II. Applicants request rejoinder of Groups I and II.

As a traverse, it is noted that the MPEP lists two criteria for a proper restriction requirement. First, the inventions must be independent or distinct. MPEP § 803. Second, searching the additional inventions must constitute an undue burden on the Examiner if restriction is not required. *Id.* The MPEP directs the Examiner to search and examine an entire application “[i]f the search and examination of an entire application can be made without serious burden . . . even though it includes claims to distinct or independent inventions.” *Id.*

Neither of these criteria has been met. The subject matter of claim 38 **necessarily encompasses** that of claim 28. In particular, the first step of claim 38, recited in part a), is identical to the steps recited in claim 28. A claim that literally falls within the scope of another claim cannot be said to be independent or distinct. For example, if the present claims were issued, a person practicing the method of claim 38 would necessarily infringe claim 28 because claim 28 contains a subset of **the same steps**. Therefore, the restriction between Groups I and II is improper and should not be maintained because the claims are not independent or distinct.

The second criterion of MPEP § 803 is also not met because it would not present an undue burden to search and examine the claims of Groups I and II together (particularly since the independent claim of Group I is encompassed by the independent claim of Group II). The Examiner’s attention is directed to co-pending application no. 10/431,234 (“the ‘234 application”). The claims under examination in the ‘234 application are nearly identical in scope and language to those pending in this application, except that the ‘234 application relates to a different GPCR polypeptide and conditions treated. If it is not an undue burden for the Examiner of the ‘234 application to search and examine the claims together, it is difficult to understand how it is an undue burden to search and examine claims of the same nature in this application. Applicants request that the PTO take a consistent position with respect to these cases.

The Office Action further required election of a single sequence. Applicants elect SEQ ID NO: 3 with traverse. Claim 28 is a linking claim. According to MPEP § 809, should any linking claim be allowed, the restriction requirement must be withdrawn. Applicants request that such action be taken upon allowance of claim 28.

Reconsideration and withdrawal of the requirement for restriction are requested, as is substantive consideration of the pending claims.

Respectfully submitted,

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